ABSTRACT OF THE DISCLOSURE

A method of creating a milled structure in a fixed material using a moving laser beam is disclosed, where a picosecond laser provides short pulses of light energy to produce required exposure steps, where a variable rate of laser beam movement conducts the milling upon the material, where the laser beam tool path directs the milling process to produce a milled hole of high quality and repeatability, and where the knowledge of how to measure these 3 quantities is returned as feedback into the laser system. The present invention is further embodied as a spiral milled tool path structured to achieve the customer specified tapered hole shape. The constant arc speed tool path is required to produce tapered holes to customer specification.